What is claimed is:

1. A library comprising distinct LC-sense molecules.

2. The library of claim 1, wherein said LC-sense molecule comprises vector sequence and probe sequence, wherein the probe sequence is in sense orientation.

3. The library of claim 2, wherein said vector is a single strand generating phagemid.

4. The library of claim 1, wherein said LC-sense molecule has a length of from about 1,000 to about 20,000 nucleotides.

5. The library according to claim 4, wherein the distinct LC-sense molecules are separated from each other.

6. The library according claim 2, wherein said vector is pSPORT1, pBluescriptII SK(+/-) or KS(+/-), pGEM-f, M13mp, pCR2.1, pGL2 or pβ gal.

7. The library according claim 2, wherein said vector is M13 bacteriophage, f1 bacteriophage, or fd bacteriophage.

8. An array comprising a plurality of distinct LC-sense molecules stably associated with surface of a support.

9. The array of claim 8, wherein said support comprises a coating of amino-silane, poly-L-lysine or aldehyde.

10. The array according claim 8, wherein said support is slide glass, ceramic, inorganic-organic composite, flexible plastic film, silicon, metal, or membrane.

11. A method for making the array of claim 8, comprising

(i) inserting a nucleic acid fragment into a vector that generates single stranded form of the

vector;

(ii) preparing bacterial transformants by introducing the vector containing the insert into competent bacterial cells to make bacterial transformants;

(iii) infecting the transformants with helper phage to produce the LC-sense molecule;

(iv) isolating the LC-sense molecule from culture supernatant of the transformants; and

(v) arraying the LC-sense molecule onto the surface of a support.

12. The method of claim 11, wherein the nucleic acid fragment is inserted into the vector unidirectionally.

13. A method of detecting presence of DNA in a sample with respect to a population of distinct LC-sense molecules in an array comprising:

(i) labeling the DNA in the sample;

(ii) contacting a sample containing the labeled DNA with the array according to claim 8;

(iii) allowing the labeled DNA in the sample to hybridize to the LC-sense molecule in the array; and

(iv) determining binding of the DNA to the LC-sense molecule, wherein the presence of a signal on the array indicates the presence of the DNA with respect to an arrayed LC-sense molecule.

14. The method according to claim 13, wherein the label is streptavidin-alkaline phosphatase conjugate, chemifluorescent or chemiluminescent.

15. The method according to claim 13, wherein the label is Cy3 or Cy5.

16. A method for detecting presence of DNA in two or more samples of nucleic acid molecules, comprising:

(i) labeling a first population of DNA from a first sample;

(ii) labeling a second population of DNA from a second sample with a different label;

(iii) contacting a sample containing the first population of labeled DNA with the array according to claim 8;

(iv) allowing the first population of labeled DNA in the sample to hybridize to the LC-sense molecule in the array;

(v) contacting a sample containing the second population of labeled DNA with the array according to claim 8;

(vi) allowing the second population of labeled DNA in the sample to hybridize to the LC-sense molecule in the array; and

(vii) determining binding of the labeled DNA to the LC-sense molecule, wherein the presence of a signal on the array indicates the presence of the DNA.

17. A gene expression analysis kit comprising the array according to claim 8 and instructions on using the array to detect DNA in a sample.

18. The gene expression analysis kit of claim 17, comprising:

(i) a container comprising primers for generating test nucleic acids;

(ii) a container comprising dNTPs and/or rNTPs;

(iii) a container comprising post DNA synthesis labeling reagents, such as chemically active derivatives of fluorescent dyes;

(iv) a container comprising DNA synthesis enzymes;

(v) a container comprising buffer medium;

(vi) a container comprising signal generation and detection reagents;

(vii) instructions for use in detecting DNA.

19. A method of determining cancerous liver cell comprising detecting up regulation as compared to a normal liver cell of a gene selected from the group consisting of:

Cytochrome P450, subfamily IIE (ethanol-inducible) (GenBank Accession Number J02843);

Transcription elongation factor A (SII) 1;

ESTs, Weakly similar to KIAA0206 [*H. sapiens*] (GenBank Accession Number AI193075);

Human skeletal muscle 1.3 kb mRNA for tropomyosin (GenBank Accession Number AI797037);

KIAA0701 protein (GenBank Accession Number AI797037);

mRNA for transcription elongation factor S-II, hS-II-T1 (GenBank Accession Number NM_003195);

Deafness, autosomal dominant 5 (GenBank Accession Number AF073308);

KIAA1037 protein (GenBank Accession Number AI383628);

KIAA0375 gene product (GenBank Accession Number AB002373);

Prefoldin 5 (GenBank Accession Number AA287397);

KIAA0710 gene product (GenBank Accession Number AB014610);

Paired-like homeodomain transcription factor 1 (GenBank Accession Number U70370);
Retinal outer segment membrane protein 1 (GenBank Accession Number L07894);
ESTs (GenBank Accession Number Z39419);
MYC-associated zinc finger protein (purine-binding transcription factor) (GenBank Accession Number M94046);
Ubiquitin-conjugating enzyme E2L 3 (GenBank Accession Number AJ000519);
Novel human gene mapping to chromosome 1 (GenBank Accession Number AL040438);
Homo sapiens clone 24421 mRNA sequence (GenBank Accession Number AF070641);
Homo sapiens mRNA; cDNA DKFZp566J2146 (GenBank Accession Number AL050081);
Chromosome condensation 1-like (GenBank Accession Number NM_001268);
KIAA0902 protein (GenBank Accession Number AB020709);
Protein tyrosine kinase 9-like (A6-related protein) (GenBank Accession Number AI188660);
ESTs, Weakly similar to ORF YOR150w (*S. cerevisiae*) (GenBank Accession Number AI129433);
Transcription elongation factor B (SIII), polypeptide 2 (GenBank Accession Number AW327285); and
Cofactor required for Sp1 transcriptional activation, subunit 9 (GenBank Accession Number AA665998).

20. A method of determining cancerous liver cell comprising detecting down regulation as compared to a normal liver cell of a gene selected from the group consisting of:
Transmembrane protease, serine 2 (GenBank Accession Number U75329);
Human gene isolated from PAC 272L16, chromosome 1, similar to calcium/calmodulin dependent protein kinases (GenBank Accession Number AL023754);
CASP2 and RIPK1 domain containing adaptor with death domain (GenBank Accession Number AA811130);
Ariadne homolog (GenBank Accession Number AL040708); and
NADH dehydrogenase (ubiquinone) flavoprotein 1 (GenBank Accession Number AW250734).